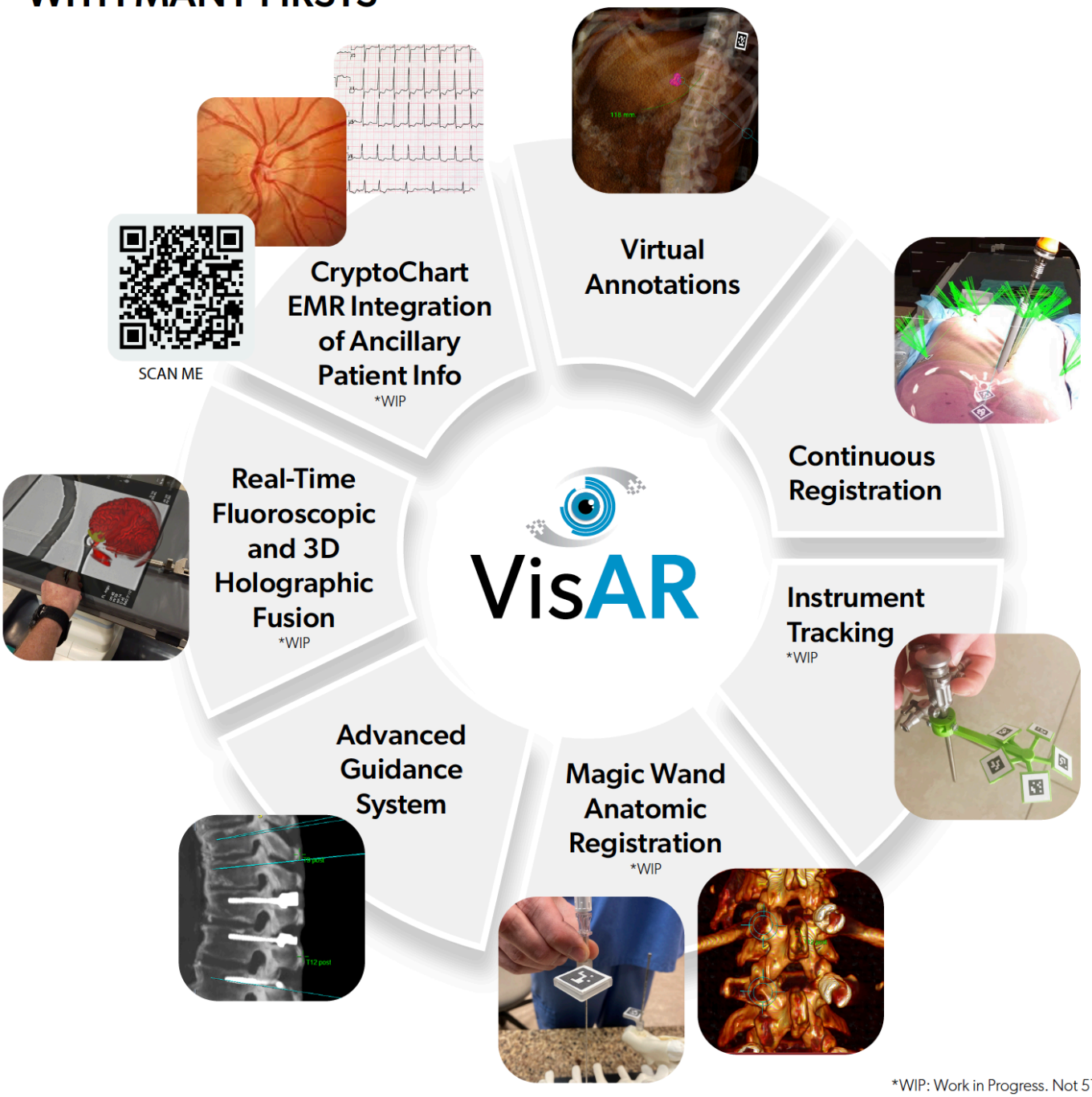
VisAR LEADS THE MARKET
WITH MANY FIRSTS



*WIP: Work in Progress. Not 510(k) cleared.

Learn more | Download the VisAR demo at the Microsoft App store at **https://www.microsoft.com/en-us/p/visar/9nh2399k92jw**

NOVARAD
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intel market ready

VisAR SPINE

TRANSFORMATIVE AUGMENTED REALITY
SURGICAL GUIDANCE SYSTEM

NOVARAD
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PRECISION
HEALTHCARE

> VisAR significantly improves my precision in the operating room. Specifically, it allows me to determine exactly where to place my incision thereby allowing me to keep the incision small—minimizing pain and also shortens my operative time by allowing me to expose the surgical target more precisely and quickly.

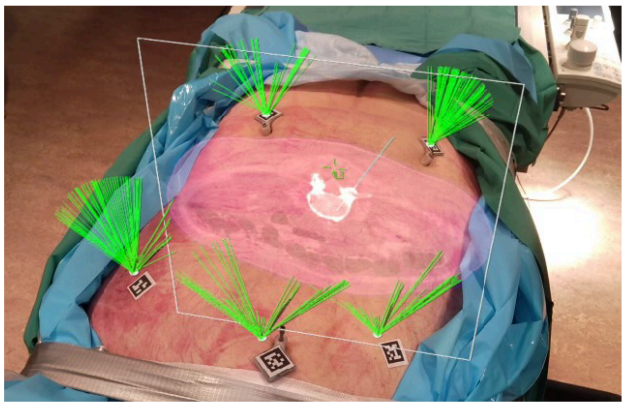
Dr. Babak Sarani
Director of Trauma and Acute Care Surgery at the GW Hospital.

ADVANCED
RENDERING

VisAR renders 2D and 3D digital images from any modality into a highly detailed projection in real-time using the Novarad Graphics Engine. Using patented virtual tool technology with an integrated targeting system, the projection is overlaid directly and precisely onto a patient's body.

PRECISE
REGISTRATION

- Optical tags
- Precise registration
- Free-hand
- Continuous registration
- Registration status indicator



INTEGRATED VIRTUAL
TARGETING SYSTEM

- Virtual tools, guide
- Dynamic alignment
- Virtual distance read-out
- Reticle for precise alignment

MINIMAL
OPERATIVE FOOTPRINT

Using optical code alignment, cameras, and sensors, VisAR maps both the patient and the surrounding environment. Using the hands-free, untethered HoloLens 2 stereogenic navigation is performed.

Novarad® VisAR is an augmented reality surgical guidance system where the entire operating room footprint is on the surgeon's head.

ADVANCED
PREOPERATIVE PLANNING

** Operative 510(k) clearance pending*

- Colorize target organs or annotate pathology to create semitransparent projections of targeted anatomy. This allows for planning and execution of the procedure, even around difficult anatomy.
- Place virtual incisions on the projected images for precise surgery.
- Navigate with precision. Mark virtual surgical guide entrance point, trajectory and location for endoscope or needle placement, or placement of a pedicle screw. Procedures can be done both under open surgery and percutaneously.

VisAR
ADVANTAGES

	Traditional Navigation Systems	VisAR	VisAR Advantage
Size	Large, cumbersome system that requires a monitor	Simple, untethered headset, no monitor required	Easier to use Smaller IT footprint
Cost	Often more than $1.5 M	$60K - $300K set up $5K monthly fee	Costs significantly less
Set up time	At least 45 minutes	2 minutes, no need for line of sight to instruments from IR transmitter	Less time in OR, less time patient is under anesthesia
Mobility	Limited utility, one patient at a time	Can be used in multiple ORs and departments simultaneously	Faster ROI
Versatility	Often sits unused	Can be used by Neuro, Ortho, Interventional Radiology, etc.	Cost spread across many uses
Scalability	1	Dozens	Easy to expand use

VisAR
LEADS THE MARKET

- Predecessor technology (OpenSight®) was first AR surgical system to receive FDA clearance using Microsoft HoloLens
- Advanced 3D rendering without tethering
- Advanced 3D image segmentation
- Patented or patent pending innovations
  - Optical Tag Registration
  - Surface Shell Registration
  - Virtual tools for incision, markers, needles, trocars and more
  - Viewing AR images in a 3D volume over patient
  - Optical encoding of login, password and image retrieval
  - Virtual Annotations
- Anatomic labeling, pathologic markup
- Dynamic virtual targeting system for tracking lesions and trocar placement
- Enterprise Imaging, HIPAA logging, LDAP logins, data encryption, auto-routing